

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,848	03/29/2001	Toivo T. Kodas	41890-01350	3550
59540	7590 11/17/2006		EXAMINER	
CABOT CORPORATION 5401 VENICE AVENUE NE			TALBOT, BRIAN K	
ALBURQUERQUE, NM 87113			. ART UNIT	PAPER NUMBER
`			1762	
			DATE MAILED: 11/17/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		(- '			
	Application No.	Applicant(s)			
	09/821,848	KODAS ET AL.			
Office Action Summary	Examiner	Art Unit			
	Brian K. Talbot	1762			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from 1, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
 1) Responsive to communication(s) filed on 21 Section 2a) This action is FINAL. 2b) This 3) Since this application is in condition for alloward 	action is non-final.	esecution as to the merits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 33 and 35-39 is/are pending in the ap 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 33 and 35-39 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of the certified copies of the certified copies 	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate			

Art Unit: 1762

1. The response filed 9/21/06 has been considered and entered. Claims 1-32,34 and 40-85 have been canceled. Claims 33 and 35-39 remain in the application.

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Applicant acknowledged the ODP, but has opted to wait to file a Terminal Disclosure until some of the claims are found allowable in either application.
- 4. In light of the amendment filed 9/21/06, the 35 USC 102 and 103 rejections over Bi et al. (2005/0158690) alone have been withdrawn.

Claim Rejection - 35 USC § 103

5. Claims 33 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz et al. (5,985,356) in combination with Wildpaner (3,835,873), Jorre et al. (3,359,784) or Bi et al. (2005/0158690).

Schultz et al. (5,985,356) teaches a process for depositing a plurality of reacted materials upon specific regions of a substrate and analyzing various properties of the deposited materials. The materials may be a variety of materials and different compositions. The materials are synthesized and analyzed (see abstract and col. 3, line 10 – col. 4, line 59). A variety of properties can be analyzed (col. 8, lines 39-57). The components are reacted after deposition that

Art Unit: 1762

includes heating (col. 9, lines 15-25). The screening techniques are various (col. 26, line 52 – col. 29, line 65).

Schultz et al. (5,985,356) fails to specifically teach a "real-time" monitoring of a mixture of the components for changes in the composition of the reacted materials.

Wildpaner (3,835,873) teaches a method of producing a mixture with a constant component composition made of several starting materials and regulating this mixture to maintain the constant composition. The mixture is analyzed with X-ray fluorescence and a change is made in order to maintain the desired composition.

Jorre et al. (3,35,9784) teaches a method of control of industrial processes by continuous analysis of a mixture having a variable composition and adjusting the values to keep a desired composition during the process (col. 1, lines 10-65).

Bi et al. (2005/0158690) teaches combinatorial synthesis methods to obtain a plurality of compositions having materially different characteristics using an apparatus having a plurality of collectors. A first quantity of fluid reactants are reacted to form a first quantity of product composition. A second quantity of fluid reactants are reacted to form a second quantity of product composition different from the first product composition (abstract). Bi et al. (2005/0158690) teaches reacting various precursor reactants and subsequently reacting an altered version of the reactants and continuing this process until a material having the desired composition is obtained and the reactants can be mixed ([0031]-[0032], [0041] and [0055]). The altering of the components is construed to be consistent with "real-time" basis analysis. Variety of materials can be used in the invention and include catalysts and particles ([0004] and [0047]). The material is depositing by nozzles such as ink-jet which would meet the claimed direct-write

limitation ([0008] and [0077]). The coating can be subjected to further processing including heat treatment ([0102]-[0115]).

Therefore, it would have been obvious at the time the invention was made to have modified Schultz et al. (5,985,356) process to incorporate "real-time" monitoring of the linear multi-layered structure as evidenced by Wildpaner (3,835,873), Jorre et al. (3,35,9784) or Bi et al. (2005/0158690) with the expectation of achieving a more consistent final product as a result of tighter control of the process to avoid downtime or unacceptable results.

While the Examiner acknowledges the fact that the references fail to specifically teach forming linear multi-layered structures, the use of pastes in ink-jet nozzles for forming linear features is commonplace in the art.

Double Patenting

6. Claims 33 and 35-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 48,52,56,58 and 59 of U.S. Patent No. 09/821,723.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not yet been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Page 5

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Response to Amendment

- 7. Applicant's arguments with respect to claims 33 and 35-39 have been considered but have not been found persuasive.
- 8. Applicant argued that the prior art (Wildpaner (3,835,873) and Jorre et al. (3,359,784)) are of non-analogous art.

Applicant argued that the Bi et al. (2005/0158690) teaches controlling the compositional ratio of "discrete" collection of the coating and not for real-time.

The Examiner disagrees and directs applicant to the rejection above where "real-time" adjustments are made in the compositional components of Bi et al. (2005/0158690). Furthermore, The test of obviousness is not express suggestion of the claimed invention in any or all references but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them. In re Rosselet, 347 F.2d 847, 146 USPQ 183 (CCPA 1965); In re Hedges, 783 F.2d 1038.

Application/Control Number: 09/821,848

Art Unit: 1762

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Page 6

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian K Talbot Primary Examiner Art Unit 1762

BKT